1 1.

March-04-14 2:59:57 PM

Item ID:	D3391-023	.,		. h.	Accept	*N900	040	1100)* ·	Setup Star	t *N	S1*
Item Name:	Mid Tube As	sembly				•	•			Sto	• *N	S 2*
Start Date:	04/03/2014	Start Qt	y: 1.00	*1*	*-	Cust Item 1	D:				, I W	
Required Date:	: 04/03/2014	Req'd Q	ty: 1.00	*1*		Customer:						
Reference:	1 . X	- 1	:	•	•						*	
Approvals:	Process Pla	an:)	Date: 14-93-0	S Tooling:	D	ate:	_	F	Run Stai	^I <i>V</i> I	P1 *
	QC.	- ·		Date:	SPC (Y/N):	D	ate:		•	Sto	*N	R2*
Sequence ID/ Work Center II	D ,	Operatio Descripti			Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr		, , , , , , , , , , , , , , , , , , ,								
D3391	I											
100				·	0.00			,				1
100 Skidtubes	F	Skidtubes	Memo		0.00		Tr.		***			· · · · · · · · · · · · · · · · · · ·
Skidtubes	,			e to finish length as per D	wg D3391		A					
•				lot holes using DT8796 (Date on one side only as per	oo not drill "B" holes) and d Dwg D3391	rill only 1 fwd		,				
3.44			3-Open s	addles and GHW holes to	Ø0.375" exept for fwd sadd	le hole of detail				•	•	u.
			4-Remov	e .030" from Fwd indexing	g Ridge as per Dwg D3391							
	•		5-Remov	e indexing ridge on Fwd &	Aft end of skidtube as per	Dwg D3391		_	÷		. /	
			6-Deburr					<u> </u>	f NE	06-à	il .	
· ·	**************************************		paint man	rker,	ate Jig DT8217 Identify Ø0				L 19°	ee-a		
w.		\$. 1		vearplate holes of D3391-0) as per Dwg D3391	23 assembly detail section	G-G to Ø0.250"			•			
		· • •	(20 holes) as per Dwg D3391	23 assembly detail section WEARPLATE HOLES***			(کریر				

DQA:		Date:													
	-				WORK ORDER NON	-C(ONFO					AEROSPACE			
QA Closed:	•	Date:							Work Orde	r update only	Ш				
Work Orde	r:	•			DISPOSITION			AGAINST	DEPARTME	NT/PROCESS					
Part N NCR N	-				Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Crosstube Machining Small Fab noforming Finishing Large Fab Composite		Water Je Prod. Eng. Coor Store/Packagin Supplie		Engineering Quality Other			
Root				Desci	ription of work order update		l Initial	Action	Sign 8						
Cause	Date	Step	Qty		or non-conformance	ı	ief Eng	ł ·	Date		on l	QCInspector			
Design Doc/Data Equip/Tooling										* / / / * * / / * * * * / * * * * / *					
Handling/Pre Material Operator	<u></u>		٤												
Offset/Setup Process Supplier															
Training Transport Unapproved							g 7-								
<u> </u>			.1	<u> </u>		FA	ULT CA	TEGORY		100		2%			
Landin	g Gear				General		F.	1		***		Take .			
	g Gear Bending Centre Not Concentric Cracks				Bend BOM/Route Broken/Damage/Defect		Folio/F Grain Hardwa	Program are	_	Dimensions der tolerance prect		Pressure/Forced Set-up Temperature/Cure			
	Crimp/Kink/Ripple/Wave Cuffs				Burrs O Contamination	E	1 '	ion Incomplete/Unqualified tions Incomplete/Unclear	Part Lost Part Mov	_	$\boldsymbol{\vdash}$	Weld Wrong Stock Pulled			
	Crushing Heat Treat				Countersink Cut Too Short		Misalig Mislabe	gned/off center eled	_	ed Wrong oss/Surge		gther			
	Inspection Strip in Tube Marks/Chatter			-	Drawing Drill Holes		Misrea Off-set				·	**************************************			
	Marks/Chatter Turning Sequence Wave/Twist in Tube				Finish Fit/Function		Out of	Calibration		unifer		-			

Item ID:	D3391-023			Accept	*N90	0040	100)* ፡	Setup Star	*NS1*
Revision ID: Item Name:	Mid Tube Asse	embly			•				Stop	*NS2*
Start Date:	04/03/2014	Start Qty: 1.00	*1*	k	Cust Ite	em ID:			•	
Required Date:	04/03/2014	Req'd Qty: 1.00	*1	k .	Custom					
Reference:									•	•
Approvals:	Process Pla	n:	Date:	Tooling:		Date:		I	Run Start	"NHI"
	QC:		Date:	SPC (Y/N):		Date:		,	Stop	*NR2*
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Hours	Tool I	D Tool #	Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp
	:	10-Open .37	5" holes to .438" ***	do not open fwd saddle holes	*** BE14-0	24				• • • • • • • • • • • • • • • • • • •
	•	11-Locate D	3391-021 in D3391-	023 at 9.00" (see view z-z)		•,	•		•	
•		12- Transfer	drill one fwd saddle	hole only to .188" dia, transf	er drill alk					,
		remaining fv	vd saddle holes using	DT 8149 locating from previous ensure perfect allingment, o	iusly drill .188"	. ·		v	•	
			d pilot holes in D339 BATCH: 115 49	21-023/-021 to 0.438" dia. in	D3391-021					•
			T8217, locating from les intó D3391-021.	n two previusly drilled holes, o	drill remaining	\.		, ,	•	
			; from two fwd wearp es in D3391-021 usi	plate holes in D3391-023 drill ng DT8937	remaining 6	/,) .	•	
		. 15- Open 10	wearplate holes in D	03391-021 to 0.297" dia.	•	. >		· ·	1.	
•		16- insert D3	3391-021 into D3391	1-23	10	. /-	,	14-8	~11°	• •
		17- insert T-	pins into first and thi	ird fwd saddle holes	•	./		l -	•	• •
	•	18- ON FIRS	ST SIDE ONLY drill	out 2nd and forth fwd saddle	s holes to 0.500"				***	, O.
• • •		•	SIDE ONLY ream	out 2nd and forth saddle hole	to 0.499".					
•		20-Deburr a at aft end.	nd blow out all chips	from inside tube, scribe batc	h # in D3391-023	•				•

DQA:			Date:		·	DART							
QA Closed:			Date:			WORK ORDER NON	-00	JIVFOI	MINIMICE / I		ork Order up	date only	AEROSPACE
Work Orde	er: 🦯					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Part N	- - lo				<u> </u>	Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	Т				Desci	ription of work order update		nitial	A	ction	Sign &		
Cause		Date	Step	Qty		or non-conformance		ief Eng		scription	Date	Verification	QC Inspector
Design Doc/Data										·			·
Equip/Tooling Handling/Pre													
Material													
Operator	\Box												
Offset/Setup	_					•							
Process	4												
Supplier 													
Training													
Transport	-	•	-										
Unapproved				<u></u>		,	ΕΛΙ	III T CAT	I TEGORY				
Landir	ng Ge					General	<u></u>	OLI CA.	IEGORI				
[_	Bending	•			Bend		l _{Eolio} /P	rogram		Outside Dim	ensions [Pressure/Forced
	_	Centre No	t Concer	ntric		BOM/Route	-	Grain	. 08		Over/Under	}	Set-up
	_	Cracks				Broken/Damage/Defect	—	Hardwa	ire	·	Part Incorred		Temperature/Cure
•	_				Burrs		1	ion Incomplete/	Unqualified	Part Lost/Mi	⊢	Weld	
	Crimp/Kink/Ripple/Wave Cuffs				Contamination		1	ions Incomplete	· · · · · · · · · · · · · · · · · · ·	Part Moved	· ·	Wrong Stock Pulled	
	Crushing				Countersink		4	ned/off center		Positioned V			
Ì	Heat Treat				Cut Too Short		Mislabe			Power Loss/		Other	
ľ	Inspection Strip in Tube			Tube		Drawing		Misread			_		•
	_	Marks/Ch			-	Drill Holes		Off-set					
		Turning Se	equence			Finish		Out of 0	Calibration		•	*	
	Wave/Twist in Tube			e		Fit/Function		Out of S	Sequence *				

W	ork	Ord	er ID	11427	13
7 7	OT 17	O ₁ u	\mathbf{u}		_

Quality Control

Memo

114273

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March-04-14 2:59:57 PM Item ID: D3391-023 Accept *N900040100* Setup Start Revision ID: Item Name: Mid Tube Assembly *1* **Start Date:** Start Otv: 1.00 04/03/2014 **Cust Item ID: Required Date: 04/03/2014** Rea'd Otv: 1.00 *1* **Customer:** Reference: Start Run Process Plan: Date: Tooling: Approvals: Date: Stop OC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool ID Plan Set Up/ Tool# Reject Reject Accept Ipsp. **Work Center ID** Description Run Hours Code **Qty Qty** Number Stamp 110 QC5- Inspect part completeness to step on W/O 0.00 DAS DAS 24 *110* OC 0.00 Memo Quality Control 120 Chemical Conversion Coat per OSI005 4.1 0.00 Mg 14.8.12 *120* HandFinish 0.00 Memo Hand Finishing 130 QC7-Inspect Chemical Conversion Coat 0.00 *130* 0.00

DQA:		. Date:				TAAC ^Z									
QA Closed:		Date:			WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE	14/6	ork Order up	vdata only - [AEROSPACE		
QA Closed.		Date.								·					
Work Orde	er:				DISPOSITION			AGAINST	Γ DE	PARTMENT,	PROCESS		•		
				-	Rework			Skid-tube Crosstube			Water Jet		Engineering		
Part N	lo.				Scrap			Machining Small Fat	_	Pro	d. Eng. Coor.		Quality		
		1			Use-as-is		Thern	noforming Finishing		Rec/Stor	e/Packaging		Other		
NCR N	lo				Suspected Unapproved			Large Fab Composite	9		Supplier				
Root		1	1	Descr	iption of work order update		nitial	Action		Sign &					
Cause	Date	Step	Qty		or non-conformance	l	ief Eng			Date	Verification	1	QC Inspector		
Design		·											<u> </u>		
Doc/Data			`~												
quip/Tooling															
Handling/Pre			•												
Material															
Operator															
Offset/Setup															
Process															
Supplier					; 5			,							
Fraining															
Fransport											•				
Jnapproved			<u> </u>												
						FA	JLT CAT	regory							
Landin 	ng Gear				General		1			Ī					
ļ.	Bending				Bend		_	Program	\vdash	Outside Dim	F		Pressure/Forced		
ŀ	Centre No	ot Concer	ntric		BOM/Route		Grain		\vdash	Over/Under	F		Set-up		
	Cracks				Broken/Damage/Defect	ldash	Hardwa		-	Part Incorred	F		Temperature/Cure		
-	Crimp/Kink/Ripple/Wave Burr		Burrs	$oxdapsymbol{oxed}$		ion Incomplete/Unqualified	\vdash	Part Lost/Mi	~ F		Weld				
].	Cuffs	·		\vdash	Contamination			tions Incomplete/Unclear	\vdash	Part Moved			Wrong Stock Pulled		
1				Countersink		_	ned/off center	_	Positioned V			1			
-				Cut Too Short		Mislabe			Power Loss/	Surge [Other			
<u> </u>	Inspection Strip in Tube				Drawing		Misread								
ļ	Marks/Ch				Drill Holes	<u></u>	Off-set								
ļ	Turning S	•			Finish	<u></u>		Calibration							
	Wave/Twist in Tube				Fit/Function		Out of S	Sequence							

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Item ID: Revision ID:	D3391-023		•	Accept	*N900	040	100)*	Setup	Start	*N	S1*	
Item Name:	Mid Tube Ass	embly								Stop	*N:	S2*	
Start Date:	04/03/2014	Start Qty: 1.00	*1*		Cust Item	ID:							
Required Date:	04/03/2014	Req'd Qty: 1.00	*1*		Customer:								
Reference:			• .							_			
Approvals:	Process Pla	n:	Date:	_ Tooling: _	D	ate:			Run	Start	*N	R1*	
	QC:	•	Date:	_ SPC (Y/N):	D	ate:				Stop	*N	R2*	
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp	
140 Skidtubes		Skidtubes Memo		0.00									
Skidtubes		1-Open floa 2-C'sink flo 3- Prepare to 4-Bond web Adhere for A/R Sikafle batch#:	t bag holes as per dwg at bag holes as per dwg ube for welding b in place as per Dwg D339 12 hours) x exp: 14-11-26 112945-7 URE WEB IS INSERTED	ten de			4-8	3-1	3				DA: 18
150		QC5- Inspect part comp	leteness to step on W/O	0.00				,			,	2 /	
150 QC Quality Control		Memo		0.00	·					T	M-6	06-14	

Quality Control

DQA:			Date: _			-								
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP	DATE			AEROSPACE	
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT	PROCESS		
					_	Rework			Skid-tube	Crosstube	7	Water Jet	Engineering	
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality	
						Use-as-is		Therr	noforming	Finishing	Rec/Stor	e/Packaging	Other	
NCR N	10				_	Suspected Unapproved			Large Fab	Composite]	Supplier		
Root					Descr	ription of work order update		nitial	Actio	on	Sign &	······		
Cause	D	ate S	Step	Qty		or non-conformance	ı	ief Eng	Descrip		Date	Verification	QC Inspector	
Design						,								
Doc/Data														
Equip/Tooling						•			_					
Handling/Pre									ζ,					
Material]												
Operator														
Offset/Setup														
Process				. ,										
Supplier				<u>۲</u>		•								
Training				-										
Transport						, i								
Uñapproved			j											
							FAL	ULT CA	regory					
Landir	ng Gear					General	_				_	_		
,	Ben	ding				Bend		Folio/F	rogram	<u>_</u>	Outside Dim	ensions	Pressure/Forced	
	Cen	re Not (Concen	tric	<u> </u>	BOM/Route		Grain		_	Over/Under	tolerance	Set-up	
,	Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	:i	Temperature/Cure		
	Crimp/Kink/Ripple/Wave			/Wave		Burrs		Inspect	ion Incomplete/Unq	qualified	Part Lost/Mi	ssing	Weld	
,	Cuffs			 	Contamination		4	ions Incomplete/Ur	nclear	Part Moved		Wrong Stock Pulled		
	Crushing				Countersink		•	ned/off center		Positioned V		_		
	Heat Treat				Cut Too Short		Mislabe			Power Loss/	Surge	Other		
	Inspection Strip in Tube				Drawing	匚	Misrea	t t						
ļ	Marks/Chatter				Drill Holes		Off-set				·			
ļ	Turning Sequence					Finish		Out of	Calibration					
	Wave/Twist in Tube					Fit/Function		Out of	Sequence					

Work Ord March-04-14 2		4273		*112	1273*						Page	5
Item ID: Revision ID: Item Name:	D3391-023 Mid Tube Ass	sembly		Accept	*N900	040	100)* ·	Setup Star Stoj	17	S1* S2*	
Start Date: Required Date: Reference:	04/03/2014	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item l Customer:	D:				-		
Approvals:	Process Pla	nn:	Date:	Tooling: SPC (Y/N):	4	ate:		F	Run Star Stoj	/IV	R1* R2*	
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
160 Skidtubes Skidtubes		Skidtubes Memo 1-Weld cros 2-grind weld	ssbolt spacer as per dwg l d flush	0.00 A/R D3391 & QSI 004 M/2 DD 14-8-	9285 B 18	² E140{	3-14					_

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Memo

Quality Control

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
160		0.00								
160 Skidtubes Skidtubes	Skidtubes Memo 1-Weld crossbolt spacer as per dwg D33 2-grind weld flush	0.00 AR 91 & QSI 004 M/2° DD 14-8-	9285 Bi 18	<u> </u>	3-14					_
170 *17 0 * QC	QC10- Inspect visual per QSI004- ground welds Memo	0.00 DAS 16 0.00 9-89								_
Quality Control 180 *1 A \ *	QC5- Inspect part completeness to step on W/O		AS 6 1208(9							_

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:			Date:			WORK ORDER NON	-((JNFOI	RIVIAINCE / U		W	ork Order up	date only	\neg	AEROSPACE
Work Orde	ar.	· · · · · · · · · · · · · · · · · · ·				DISPOSITION			· · · · · · · · · · · · · · · · · · ·	AGAINST	DE	PARTMENT	/PROCESS	_	
WOIR OIGE						Rework	1		Skid-tube	Crosstube		1	Water Jet	\neg	Engineering
Part N	J٥					Scrap			Machining	Small Fab	_	Pro	d. Eng. Coor.	\dashv	Quality
, 4, 1, 1						Use-as-is	1		noforming	Finishing		4	e/Packaging	\dashv	Other
NCR N	lo					Suspected Unapproved		111.011	Large Fab	Composite	_	1100,010.	Supplier	\exists	
													·-	_	
Root					Desci	ription of work order update		Initial		ction		Sign &			-
Cause	D.	ate	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	니	QC Inspector
Design															
Doc/Data															
Equip/Tooling															
Handling/Pre	_														
Material															
Operator		1												1	
Offset/Setup															·
Process															
Supplier	_														
Training	_														
Transport															
Unapproved															
•					···		FAI	ULT CAT	TEGORY	A					
Landir	ng Gear					General		,					-		
	Ben	ding			`	Bend	<u></u>	Folio/F	rogram			Outside Dim	ensions		Pressure/Forced
	Cen	tre No	t Concen	itric		BOM/Route		Grain				Over/Under	tolerance	\Box	Set-up
				Broken/Damage/Defect		Hardwa	ire		_	Part Incorred	ાં		Temperature/Cure		
	Crimp/Kink/Ripple/Wave Burrs			Burrs	L	Inspect	ion Incomplete/L	Inqualified		Part Lost/Mi	ssing	\Box	Weld		
				Contamination		instruct	ions Incomplete/	/Unclear		Part Moved		\Box	Wrong Stock Pulled		
Ĺ				Countersink		Misalig	ned/off center		<u> </u>	Positioned V	Vrong				
Heat Treat			Cut Too Short		Mislabe	eled			Power Loss/	Surge		Other			
Į	lnsp	ection	Strip in	Tube		Drawing		Misread	d						
Į	Mar	ks/Cha	atter			Drill Holes		Off-set							
	Turr	ning Se	quence			Finish		Out of 0	Calibration						
	Wave/Twist in Tube			۵		Fit/Function		Out of	Saguanca						

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March-04-14 2:59:57 PM

Muich-04-14 2.	.J9.J/ I WI										
Item ID: Revision ID:	D3391-023			Accept	*N900	040	100) *	Setup St	1	IS1*
Item Name:	Mid Tube Ass	sembly							S	top *\	IS2*
Start Date: Required Date:	04/03/2014	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ?	ID:					
Approvals:	Process Pla	nn:	Date:	Tooling:	D	ate:		F		art *N	IR1*
	QC:		Date:	SPC (Y/N):	D	ate:			3	*/	IR2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185		Pressure Wash per QSIO	005 4.3	0.00					- /	n 1490	O1
*1 Q C * HandFinish Hand Finishing		Memo AND REAL	LODINE AS PER PAR	0.00					M	<u> 9 1492,</u>	<u>/</u>
¹⁹⁰ *1 Q∩ *		White Gloss(Ref:4,3.5.1		n 0.00				/	K	14-9-9	% 24. % 84. %
Powder Coating		Memo START TII	ME://5 MPERATURE: 3	0.00					·	<u> </u>	<u> </u>
²⁰⁰		QC3- Inspect Part Finis	h	. 0.00				.	ſ	H	wloele
QC Quality Control		Мето	•	0.00				11	-		_ cyrovile



DQA:		_ Date:			TRAC ²										
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / L		Work Order u	ndate only	AEROSPACE			
QA Closea.		Date.				-	1			WOIR Older d	puate only				
Work Orde	er:				DISPOSITION				AGAINST	DEPARTMENT	/PROCESS				
					Rework	1		Skid-tube	Crosstube	\neg	Water Jet	Engineering			
Part N	lo.				Scrap	1	Machining Small Fab			Pro	od. Eng. Coor.	Quality			
					Use-as-is	1	Therr	noforming	Finishing	Rec/Sto	re/Packaging	Other			
NCR N	lo				Suspected Unapproved			Large Fab	Composite		Supplier				
	<u> </u>								· · · · · · · · · · · · · · · · · · ·	·					
Root				Desci	ription of work order update	1	Initial		ction	Sign &					
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector			
Design	_		· ·												
Doc/Data			ļ												
Equip/Tooling															
Handling/Pre															
Material															
Operator	\dashv	-													
Offset/Setup Process															
Supplier	-														
Training	:														
Transport						1									
Unapproved	-														
onapprotea			<u>. </u>	<u>. </u>		FA	ULT CA	TEGORY				.			
Landir	ng Gear				General										
Г	Bending				Bend] Folio/F	rogram	[Outside Din	nensions	Pressure/Forced			
Ī	Centre N	lot Conce	ntric		BOM/Route	\vdash	Grain	Ü		Over/Unde	r tolerance	Set-up			
Ţ	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorre		Temperature/Cure			
Ī	Crimp/Kink/Ripple/Wave				Burrs		Inspect	ion Incomplete/U	Jnqualified	Part Lost/N	lissing	Weld			
Ī	Cuffs				Contamination		Instruct	ions Incomplete,	/Unclear	Part Moved		Wrong Stock Pulled			
Crushing				Countersink		4	ned/off center		Positioned '	— Wrong					
Heat Treat				Cut Too Short		Mislabe			Power Loss	/Surge	Other				
Inspection Strip in Tube				Drawing		Misread	t								
Ī	Marks/C	hatter			Drill Holes		Off-set								
Ī	Turning	Sequence		· IS	Finish		Out of	Calibration							
Wave/Twist in Tube				تنمأ	Fit/Function		Out of	Saguenca							

Work Order ID 114273

Packaging

114273

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March-04-14 2:59:57 PM Accept Item ID: D3391-023 *N900040100* Setup Start **Revision ID:** Stop Item Name: Mid Tube Assembly *1* **Start Oty:** 1.00 **Start Date:** 04/03/2014 **Cust Item ID: Required Date:** 04/03/2014 Rea'd Otv: 1.00 *1* Customer: Reference: Start Run Date: **Tooling:** Process Plan: Date: **Approvals:** Stop OC: Date: SPC (Y/N): Date: Reject Reject Sequence ID/ Operation Tool ID Tool # Plan Accept Insp. Set Up/ Number Stamp Work Center ID Code Oty **Qty** Description **Run Hours** 0.00 230 HandFinishing *220* HandFinish 0.00 Hand Finishing 1- press fit D3591-1 spacers using DT9416 starting from 0.500" side 2-Install Inserts as per Dwg 240 QC5- Inspect part completeness to step on W/O 0.00 *240* 0.00 OC Memo Quality Control D412-742-043/B123616 14 d Il Woellu Identify as per dwg & Stock Location: (1) 250 *950* **Packaging** 0.00 Memo

DQA:			Date:		<u></u>	WORK ORDER NON-	DART						
QA Closed:			Date:			WORK ORDER HOR			WINITEL / O		Vork Order up	odate only	AEROSPACE
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS	
Part N	 No					Rework Scrap Use-as-is Suspected Unapproved		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descr	iption of work order update	Ī	nitial	al Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	chief Eng Description			Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training " Transport Unapproved		See Sep Qty Or non-comormance Chief E											
							FAL	JLT CAT	TEGORY				
Landir	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence					General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	ion Incomplete/Ur ions Incomplete/U gned/off center eled	·	Outside Dim Over/Under Part Incorre Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct issing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	Wave/Twist in Tube					Fit/Function		Out of Sequence					

Work Orde		4273				Page 8							
Revision ID:	D3391-023 Mid Tube Ass	embly		Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date: Reference:	04/03/2014 04/03/2014	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:			_				
Approvals:	Process Pla	n:	Date:	Tooling: SPC (Y/N):		nte:			Run	Start Stop	^IV	R1* R2*	
Sequence ID/ Work Center ID 260)	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accep Qty	t Rej Qty	_	Reject Number	Insp. Stamp	
260 QC Quality Control		Memo		0.00						4/1°	<u>1/11</u> 25	1409-1	

DQA:		Date:			WORK ORDER NON-CONFORMANCE / UPDATE										
QA Closed:		Date:			WORK ORDER WORK		JIVIOI	NVIANCE / OPDATE	W	ork Order up	odate only	AEROSPACE			
Work Order:	:	•			DISPOSITION			AGAIN	ST DE	PARTMENT	/PROCESS				
Part No).				Rework Scrap Use-as-is Suspected Unapproved		Skid-tube Crossto Machining Small Thermoforming Finish Large Fab Compo			4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other			
Root				Desci	ription of work order update		nitial	Action		Sign &		Į.			
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector			
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved															
4						FAI	ULT CAT	EGORY		,					
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	Crimp/Kin Cuffs Crushing Heat Trea		/Wave		Burrs Contamination Countersink Cut Too Short		Inspecti Instruct	on Incomplete/Unqualified in incomplete/Unclear in incomplete/Unclear in incompleter		Part Lost/Mi Part Moved Positioned V Power Loss/	ssing Vrong	Weld Wrong Stock Pulled Other			
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Picklist Print

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Work Order ID: 114273

114273

Parent Item:

D3391-023

D3391-023

Parent Item Name: Mid Tube Assembly

Start Date: 04/03/2014

Required Date: 04/03/2014

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.10.20New Issue KJ/EC IPP B06.02.10ECN773 dwg rev.D EC

IPP C 07.03.20 rev F dwg EC EC IPP D 07.03.28 re-format IPP E 07.10.31 ecn 1053P EC

IPP Rev:F ECN 1056 07-11-13 DD verified by: EC IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC

IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC

IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP Rev:J add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Status Issued
D2500-1-100		Manufactured	No			100	Each	85.0000	1	1		/
D2500-1-	-100								**		BE	M-06-24
				Location	Į.	Loc	<u>Oty</u>	Loc Code				
•				HALL	82373		85		٠		-	
					86065		24 61		• -		_	
D3389-1		Manufactured	No			140	Each	9.0000	1	1	_	
D3389-1 []	k								**			
				Location LG	113057	Loc	Oty 9 9	Loc Code	_1	<i>D</i>	- 14-8	8-13//
D3681-1		Manufactured	No		113037	160	Each	176.0000	5	5	_ ′	
*D3681-1	k								**			BE14081
Spacer				Location	l.	Loc	Otv	Loc Code			(B114884
				LG001			176		_			
					108647		40		_		_	
					109109		136		_		_	

DQA:			Date:	=		WORK ORDER NON-CONFORMANCE / UPDATE										
QA Closed:			Date:			WORK ORDER NON	-C(JNFOI	RIVIANCE / C		Nork Ordei	r upd	ate only	AEROSPACE		
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Part N	 No	***			_	Rework Scrap Use-as-is Suspected Unapproved	Scrap Use-as-is ected Unapproved			Crosstube Small Fab Finishing Composite	pro Rec/Sto		Water Jet Eng. Coor. /Packaging Supplier	Engineering Quality Other		
Root					Descr	iption of work order update	Ī	nitial	Action		Sign &	į.				
Cause	D	ate	Step	Qty		or non-conformance	Ch	Chief Eng Description			Date		Verification	QC Inspector		
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved																
							FAL	JLT CAT	EGORY							
Landi	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence					General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	on Incomplete/U ions Incomplete/ ned/off center led	'Unclear	Outside I Over/Und Part Inco Part Lost, Part Mov Positione Power Lo	der to rrect /Miss red ed Wre	olerance ing ong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other		
	Wave/Twist in Tube					Fit/Function		Out of S	Sequence				-			

March-04-14 2:59:57 PM

Work Order ID: 114273

114273

D3391-023

Parent Item:

D3391-023

Parent Item Name: Mid Tube Assembly

Start Date: 04/03/2014

Required Date: 04/03/2014

Start Qty: 1.00

**

Required Qty: 1.00

D3591-1

Manufactured

Each

90.0000

D3591-1

Bushing

Location	Loc Oty	Loc Code			
FG	10	0115577			
92873	10	B115533		<u> </u>	
FP001	80				
100699	5				
107918	38				
109107	37			•	
	230 Eac	h 1,176.000	20	20	,

ALS4-1032-130

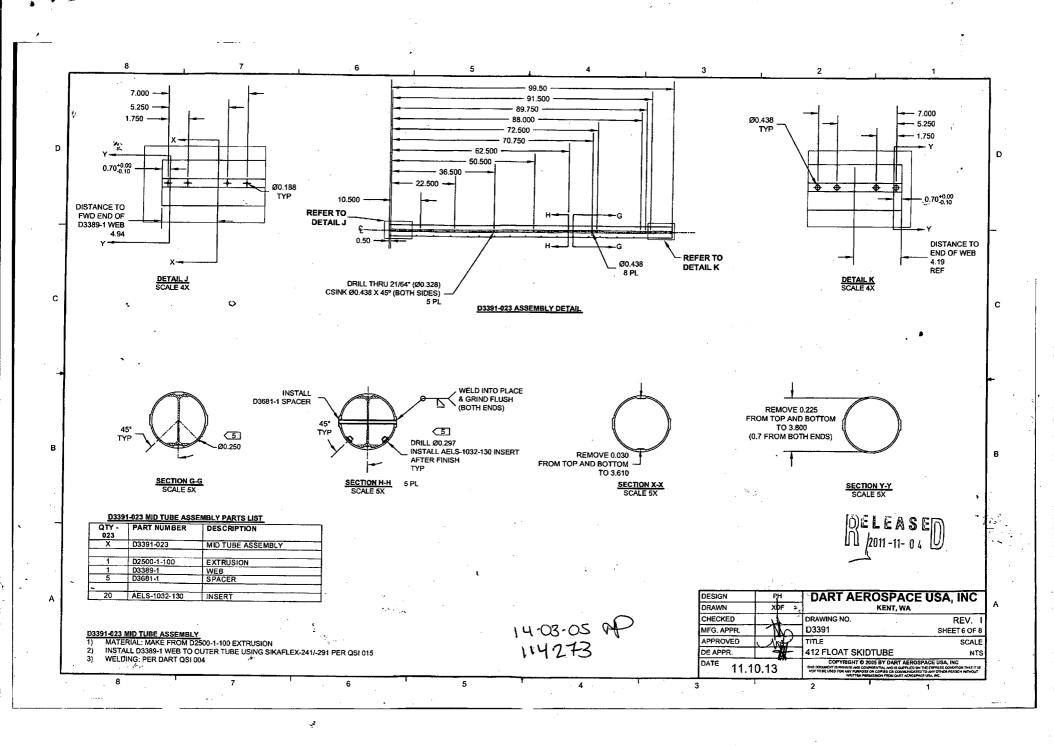
AELS4-1032-130 Purchased

AI S4-1032-130

Rivnut

Location	<u>1</u>	Loc Oty	Loc Code	
ST279		1119	M128649	
	M128179	158	VII (C 0 PH)	X20
	M128211	961		
st510		57		
	M126109	57		

DQA:			Date:													
						WORK ORDER NON-CONFORMANCE / UPDATE										
QA Closed:			Date:					,	* 1 de		Wor	rk Order up	date only			
Work Orde	er:	•				DISPOSITION		:		AGAINST	DEP	ARTMENT/	PROCESS			
_ :					_	Rework			Skid-tube	Crosstube			Water Jet	Engineering		
Part N	۱٥					Scrap			Machining	Small Fab	4		d. Eng. Coor.	Quality		
NCR N	۸o					Use-as-is Suspected Unapproved		Thermoforming Finish Large Fab Compos			~—			Other		
Root			<u> </u>		Desci	ription of work order update		nitial	Action		Т	Sign &				
Cause		Date	Step	Qty		or non-conformance		ief Eng				Date	Verification	QC Inspector		
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Equip/Tooling																
Handling/Pre					,	70 14 (14 (14 (14 (14 (14 (14 (14 (14 (14 (,			*	*.		
Material						•								,		
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Offset/Setup																
Process			·										4	·		
Supplier												*				
Training																
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Unapproved						· ·										
							FAI	JLT CAT	regory							
Landi	ng G	iear		ec."		General							<u>xv</u>			
, i		Bending				Bend		Folio/P	rogram			Dutside Dime	ensions	Pressure/Forced		
		Centre No	t Concer	ntric	`\	BOM/Route		Grain			\Box	Over/Under	tolerance <u> </u>	Set-up		
		Cracks		y.i		Broken/Damage/Defect		Hardwa	re		F	Part Incorrec	í <u> </u>	Temperature/Cure		
	Crimp/Kink/Ripple/Wave					Burrs ·	•	Inspect	ion Incomplete/Unc	qualified	F	Part_Lost/Mis	ssing	Weld		
,	Cuffs					Contamination		Instruct	ions Incomplete/Ur	nclear	F	Part Moved		Wrong Stock Pulled		
	Crushing					Countersink		Misalig	ned/off center		F	Positioned W	/rong	_		
	Heat Treat					Cut Too Short		Mislabe	eled 🔑		F	Power Loss/S	Surge	Other		
• 1	Inspection Strip in Tube					Drawing		Misread								
•		Marks/Ch				Drill Holes		Off-set		•						
** .		Turning S	equence			Finish		Out of (Calibration		_	, —				
		Wavè/Tw	ist in Tub	e e		Fit/Function		Out of Sequence								



DQA:			Date:					TRACT					
						WORK ORDER NON	-CC	ONFO	RMANCE / U				AEROSPACE
QA Closed: .	·		Date:					م		W	ork Order up	odate only	,
Work Orde	r:					DISPOSITION		,,,		AGAINST DE	PARTMENT	/PROCESS	
Part N				•		Rework Scrap Use-as-is Suspected Unapproved		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descr	iption of work order update		Initial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved				~									*
							FA	ULT CAT	EGORY _		19 1 .		
Landin	g Ge	ar				General				1	_		
	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter					Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	re on Incomplete/U ions Incomplete/ ned/off center eled	· · · · · · · · · · · · · · · · · · ·	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing	Pressure/Forced Set-up Temperature/Cure . Weld Wrong Stock Pulled Other
.	Turning Sequence Wave/Twist in Tube					Finish Fit/Function	\vdash	-{	Calibration Sequence	•			

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